

Aero Design Ltd.

Work Order Control Sheet

Work Order#: 2017-206 Date Opened: 4 December 2017 Title: Assembly

Aircraft OEM: Eurocopter Aircraft Model: AS350 Product Type: Cargo Basket Product Model: XL Ski Quantity: 1

Work Order Contents

Work Order/Build Sheets (Procedures Provided)
Additional Work Sheets (Standard Practice)
Drawings (See List Below)
Parts Distribution Sheet
Sub Component Tags
Completed Certification
Time Sheet (R&D)
Notes

Initial or N/A

CB/JC
N/A
CB/JC
CB/JC
N/A
JC
N/A
N/A

Component Completion

Quantity Complete on This Work Order
Quantity Incomplete on This Work Order
Further Processing Required Before Release
Release to Stock as Components

As Instructed

1
N/A
N/A
N/A

Build Sheet Contents

Tasks Initialled
Dual Inspections Initialled

Initial or N/A

CB/JR
CB/JR

Certification

Form One Completed
Serviceable (Green) Tag Completed
In Process (Yellow) Tag Completed
Unserviceable (Red) Tag Completed
Parts Placed in Stores for Distribution

Initial or N/A

JC
N/A
N/A
N/A
N/A

Drawing List

Drawing #	Rev #	Description	Initial or N/A
94010	1	Basket Assembly	CB/JR
70405	4	Lid Walkway Mod.	CB/JR
84240	0	Lid Brace Installation	CB/JR
84255	2	Handle Installation	CB/JR
94027	1	Placard	CB/JR
84261	2	Handle Assembly	CB/JR

Additional Documentation

Documentation of a minor change
Non-Conformance Report Required
Service Difficulty Report Required

Initial or N/A

N/A
N/A
N/A

Billing

Local (Aero Design)
Research and Development
Third Party

Initial or N/A

JC
N/A
N/A

Traveller

Install walkway on lid
Install lid on basket body
Re-tap mounting lug holes and install mount lugs
Install handle brackets
Install handle
Install lid prop
Install data plate

Initial or N/A

CB/JR
CB/JR
JT/JR
JT/JR
JT/JR
CB/JR
CB/JR

Work performed by:

Print: Jason Reke

Sign: Jason Reke

SCA: AD01

Date: 4 Dec. 2017

ICC / Dual Inspection performed by:

Print: Jeff Clarke

Sign: Jeff Clarke

SCA: AD02

Date: 4 Dec. 2017

Work Order closed by:

Print: Jeff Clarke

Sign: Jeff Clarke

SCA: AD02

Date: 8 Dec. 2017

Approved Manufacturing Facility 73-04

Form 20.D.03

Rev. Original 23 Sep 2014



Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

Nomenclature: Handle Bar Assy No. of pieces: 1

Manufacturer: Aero Design

Part No.: 84261-01 Serial/Batch No.: NSN

TTSN: N/P TSO: N/A Rem.: N/A

Work Order No.: 2017-194

Remaining Tasks to be Performed: To be installed

Signature: David Marty

Date: Nov 21/2015 Lic. No. / SCA AO 73-04 05

Serviceable



Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

Nomenclature: AS350 XL lid No. of pieces: 1

Manufacturer: Aero Design Ltd.

Part No.: 94012-01 Serial/Batch No.: NA

TTSN: NA TSO: NA Rem.: NA

Work Order No.: 2017-178-02

Remaining Tasks to be Performed: Clean up, inspect,
powder coat.

Signature: [Signature]

Date: Nov 27/2017 Lic. No. / SCA 73-04
05

In Process



Aero Design Ltd.

9888 A Malaspina Rd. Powell River, BC, V8A 0G3

Phone: 604-483-2376 Fax: 604-483-2372 E-mail: info@aerodesign.ca

AMF 73-04

Nomenclature: AS350 XL Body No. of pieces: 1

Manufacturer: Aero Design Ltd.

Part No.: 94011-01 Serial/Batch No.: NA

TTSN: NA TSO: NA Rem.: NA

Work Order No.: 2012-178-01

Remaining Tasks to be Performed: Clean up, inspect,
powder coat.

Signature: 

Date: Nov 29/2012 Lic. No. / SCA 730405

In Process

1. Approving Civil Aviation Authority/Country Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking No. 2017-0449
4. Organization Name and Address AERO Design Ltd. – 9888A Malaspina Road, Powell River, BC, V8A 0G3					5. Work Order/Contract/Invoice WO 2017-207
6. Item 1.	7. Description Cargo Basket	8. Part Number 94010-01	9. Qty. 1	10. Serial/Batch No. 94001-85	11. Status/Work New
12. Remarks Modified with walkway on lid IAW DCL704					
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 12.			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulation specified in block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations.		
13b. Signature  AD 73-04 02		13c. Approved Organization Number AMF 73-04		14b. Signature	
13d. Name Jeff Clarke - AD02		13e. Date (dd/mmm/yyyy) 04 Dec 2017		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mmm/yyyy)	
<p align="center">Installer Responsibilities</p> <p>This certificate does not constitute authority to install.</p> <p>Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.</p> <p>Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.</p>					

CUSTOM HELICOPTERS

CARGO BASKET ASSEMBLY - COMMON

Work Order: 2017-207

Date Open: 4 Dec. 2017

General

These instructions apply to all cargo basket assemblies. Refer to the following drawings, at the current revision, for dimensions and details. Drawings are linked to the source for ease of printing.

		Basket			Lid	Lid	Handle		
✓	Basket Type	Ass'y	Placard	Mat'l	Walk	Prop	Inst'n	Ass'y	Mat'l
Bell 206B – right side only									
	Short	80210	80227	Mat'l	70405	84240	84255	84261	Mat'l
	Medium	80310	80327	Mat'l					Mat'l
	Long	81110	81127	Mat'l					Mat'l
Bell 206L/407 – Right side only									
	Low Standard	69810	69827	Mat'l	70405	84240	84255	84261	Mat'l
	Low Wide	94510	94527	Mat'l					Mat'l
	Low Ski	94610	94627	Mat'l					Mat'l
	High Ski	76610	76625	Mat'l					Mat'l
Bell Medium – left or right									
	Standard	75110	75127	Mat'l	70405	84240	84255	84261	Mat'l
	Extra Large (ski)	95510	95527	Mat'l					Mat'l
	Mega	100610	100627	Mat'l					Mat'l
Bell 429 – right or left									
	Standard – Pre S/N 71	95910	95927	Mat'l	70405	84240	84255	84261	Mat'l
	Standard – Post S/N 71	95950	95927	Mat'l					Mat'l
Eurocopter AS350/AS355 – left or right									
	Short	77610	77627	Mat'l	70405	84240	84255	84261	Mat'l
	Medium	76410	76427	Mat'l					Mat'l
	Long	78410	78427	Mat'l					Mat'l
✓	Ski	94010	94027	Mat'l					Mat'l
Robinson R44 – left or right									
	Standard	90610	90627	Mat'l	70405	84240	84255	84261	Mat'l
MD600									
	Standard	82810	82827	Mat'l	70405	84240	84255	84261	Mat'l

Hyperlinking to specific excel sheet –

1. on desired excel sheet cell A1, set name of cell, eg. Assembly.
2. at end of hyperlink add #Assembly (filename.xls#Assembly).

CR3dk

1. Lid Assembly

a. Install lid bumpers on bottom.

- i. Drill $\frac{1}{4}$ " holes using center drill, 3 (standard/medium) or 4 (long/ski) places.
- ii. Fill bumper holes with RTV silicone sealant.
- iii. Insert 49205-14 lid bumper, 3 or 4 places per lid.

b. Install placard on bracket on top of lid

Note: 959 and 1006 placard is installed on body.

- i. Locate placard on bracket.
- ii. Drill #30 through placard and bracket, using holes in placard.
- iii. Remove placard and de-burr holes in placard and on bracket.
- iv. Locate placard on bracket, and cleco in place.
- v. Rivet placard with four CR3213-4-02 CherryMax rivets.

c. Option: Install walkway on top of lid (lid must be fitted with walkway provisions)

- i. Note: avoid touching surface of tread plate with bare hands to prevent smudges or marks on the top surface.
- ii. Pull tread plate from stock. Shear tread plate to length.
- iii. De-burr edges of tread plate with scotch-brite wheel on bench grinder.
- iv. Locate tread plate on lid. Hold tread plate in place with bags of lead shot.
- v. Mark and drill #30 holes:
 1. 0.25" from edge of tread plate, centre on cross members (0.38")
 2. 0.25" from edge of tread plate, middle of each walkway stringer
- vi. De-burr and counter-bore (if required to provide clearance of rivet head on checker pattern) all holes in tread plate using $\frac{1}{4}$ " piloted counter bore on both sides.
- vii. De-burr holes in lid tubes.
- viii. Apply bead of RTV silicone sealant along all tubes under tread plate.
- ix. Set tread plate in place, secure with clecos if necessary.
- x. Rivet placard with CR3213-4-02 CherryMax rivets

d. Record PO/WO of all parts (including lid) used in steps above on attached material tracking list.

2. Body Assembly

JTCR

a. Install attachment fittings

- i. Carefully remove excess powder coat from around attachment lug threads using a countersink.
- ii. Run 3/8-24 tap into attachment lugs to clear threads.
- iii. Apply anti-seize compound to attachment fittings 96710-01 (alternate: Ancra 40088-14)
- iv. Install attachment fittings with two NAS1149F0363P washers in four lugs in basket.
 1. 90610 (Robinson R44) basket only:
 - a. Install 1 fitting 90628-01 in lower forward attachment lug only.
 - b. Install 3 96710-01 fittings in remaining locations.
- v. Torque to 160-190 in-lbs (13.3-15.8 ft-lbs).

- b. 959 and 1006 Baskets only: Install inboard sheet on upper rim of basket
 - i. Locate sheet on basket.
 - ii. Drill #30 through sheet and rim, located as specified on drawing. Cleco in place.
 - iii. Remove sheet and de-burr holes in sheet and rim.
 - iv. Apply bead of RTV silicone sealant along all tubes under sheet.
 - v. Locate sheet on basket, and cleco in place.
 - vi. Rivet sheet with CR3213-4-02 CherryMax rivets.
- c. 959 Basket only: Install forward sheet
 - i. Locate sheet on basket. Ensure sufficient clamps are in place.
 - ii. Drill #30 through sheet, rim and hoop, located as specified on drawing. Cleco in place.
 - iii. Remove sheet and de-burr holes in sheet and rim.
 - iv. Apply bead of Pro-Seal sealant along all tubes under sheet.
 - v. Locate sheet on basket, and cleco in place.
 - vi. Rivet sheet with CR3213-4-02 CherryMax rivets.
- d. Record PO/WO of all parts (including basket) used in steps above on attached material tracking list.

c3 OK

3. Hinge Installation

- a. Prepare hinge.
 - i. Cut hinge to length:
 - 1. 776, 906 – 54"
 - 2. 751, 803 – 70"
 - 3. 698, 764, 945 – 72"
 - 4. 766, 784 – 90"
 - 5. 940, 946, 959 – 95"
 - 6. 1006 – 107"
 - ii. Drill #30 pilot holes using hinge jig. For long hinges, flip at specified location on jig.
- b. Install hinge on basket
 - i. Locate hinge on basket (standard baskets)
 - 1. centre fore/aft
 - 2. 0.15" – 0.18" up from bottom edge
 - ii. Locate hinge on basket (extra wide baskets)
 - 1. centre fore/aft
 - 2. set hinge at 90 degrees (as if lid would be installed) using a small square, locate vertical side at 22.5" from outboard edge.
 - iii. Drill #30 through holes in hinge into basket rim. Cleco in place with 1/8 (copper) clecos.
 - iv. Drill holes up to #21 through hinge and rim. Replace 1/8 clecos with 5/32 (black) clecos.
 - v. Remove hinge and de-burr holes in hinge and basket rim.
 - vi. Cleco hinge to basket with 5/32 clecos.
 - vii. Install hinge with CherryMax rivets
 - 1. CR3523-5-02 monel rivets – last 2 rivets in each end
 - 2. CR3213-5-02 aluminum rivets – all other locations

- c. Install lid on basket
 - i. Locate lid on hinge (all baskets)
 - 1. center fore/aft
 - 2. 0.15" – 0.18" down from top edge
 - ii. Drill #30 through holes in hinge into lid rim. Cleco in place with 1/8 clecos.
 - iii. Drill holes up to #21 through hinge and rim. Replace 1/8 clecos with 5/32 clecos.
 - iv. Remove hinge and de-burr holes in hinge and lid rim.
 - v. Cleco lid to hinge with 5/32 clecos.
 - vi. Install hinge with CherryMax rivets
 - 1. CR3523-5-02 monel rivets – last 2 rivets in each end
 - 2. CR3213-5-02 aluminum rivets – all other locations
- d. Record PO of hinge and rivets on attached material tracking list.

4. Install Handle

c3dk

- a. Install handle brackets.
 - i. Set 84267-01 handle bracket on provisions in hoops, 2 places.
 - ii. Install AN3-11A bolt, NAS1149F0363P washer (2), MS21044N3 nut. Two places per bracket, two brackets per basket.
 - iii. Torque AN3 bolts to 20-25 in-lbs.
- b. Install handle
 - i. Trim 36278-01R and 36278-01L springs to ensure end of spring does not extend past edge of handle bracket, approximately 1/8". Set springs over bushing of 84261-01 handle assembly.
 - ii. Grease two 36275-01 bushings with Mobil Grease 28 or equivalent. Insert into bushings of handle assembly.
 - iii. Locate handle on basket lid. Insert AN3-12A bolt with NAS1149F0363P through bracket on lid and handle bushing on one end of handle.
 - iv. On other end of handle, hook spring over catch rivet on handle assembly and use spring tool to twist spring to catch arm on bracket on lid while inserting AN3-12A bolt with NAS1149F0363P washer through lid bracket and handle bushing.
 - v. At first end, remove bolt and repeat step iv.
 - vi. Install NAS1149F0363P washer and MS21044N3 nut on both AN3-12A bolts.
 - vii. Torque AN3 bolts to 20-25 in-lbs.
- c. Check handle
 - i. Operate handle to ensure handle does not bind and springs hold handle in.
 - ii. Snap handle into brackets to ensure handle locks.
- d. Record PO/WO of all parts used in steps above on attached material tracking list.

CEK

5. Install lid brace

- a. Locate 36280-01 lid brace on bushing in basket. Ensure brace is on forward end of basket as it will be installed on the helicopter.
- b. On lid end, insert AN970-3 washer into end of lid brace. Insert AN3-15A bolt with NAS1149F0363P washer through AN970-3 washer, lid prop, and lid bushing. Install NAS1149F0363P washer and MS21044N3 nut on bolt.
- c. On basket end, insert AN3-17A bolt with AN970-3 washer through lid prop and basket bushing. Install NAS1149F0363P washer and MS2144N3 nut on bolt.
- d. Ensure brace is seated on lip of bushings before tightening nuts.
- e. Torque AN3 bolts to 20-25 in-lbs.
- f. Record PO/WO of all parts used in steps above on attached material tracking list.

6. 946 Basket Only: Install Cutout Brace

- a. Locate 94621-01 Brace over aft cross tube cutout.
- b. Install two AN4-6A bolts and two AN4-27A bolts with NAS1149F0463P washers.
- c. Torque AN4 bolts to 50-70 in-lbs.

PIA OK

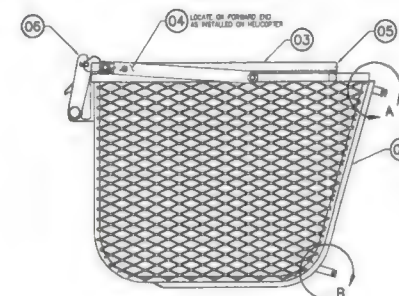
AD
73-04
02

7. Final Inspection

Dual inspection by a different person than assembled the basket.

- a. Check for general condition and correct assembly:
 - i. Bolts are tight
 - ii. Rivets are installed correctly
 - iii. Handle operates correctly
 - iv. Lid brace operates correctly
- b. Check that PO/WO numbers have been recorded.

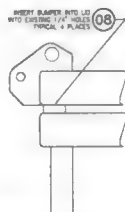
REV	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		
1	UPDATE TITLE BLOCK AND, TERMINAL, FILE, HARDWARE & I/O'S UPDATED	BJC	6/8/72



DETAIL B

SCALE 1 : 2

TYPICAL FRONT AND REAR



4 PLACES

QUICK RELEASE BASKET
 MAXIMUM POSSIBLE LOAD
300 LBS/136 KG
 AERO DESIGN LTD.
 www.aerodesign.co.uk

[illegible]

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		
1	UPDATE TITLE BLOCK; UPDATE ADDRESS AND LOGO; MAT'L THICKNESS CHANGED	BJC	10/07/2014

NOTES

- ENGRAVE 0.007 DEEP AS FOLLOWS:
"QUICK RELEASE BASKET" - 0.125 HIGH
"EUROCOPTER AS350 & AS355 SERIES" - 0.080 HIGH
"S/N 94001-XX" - 0.080 HIGH
"MAXIMUM PERMISSIBLE LOAD" - 0.125 HIGH
"300 LBS/136 KG" - 0.200 HIGH
"AERO DESIGN LTD." - 0.125 HIGH
"POWELL RIVER, BC, CANADA" - 0.080 HIGH
"www.aerodesign.ca" - 0.080 HIGH


DRILL #30 (0.129)
4 PLACES



01 PLACARD

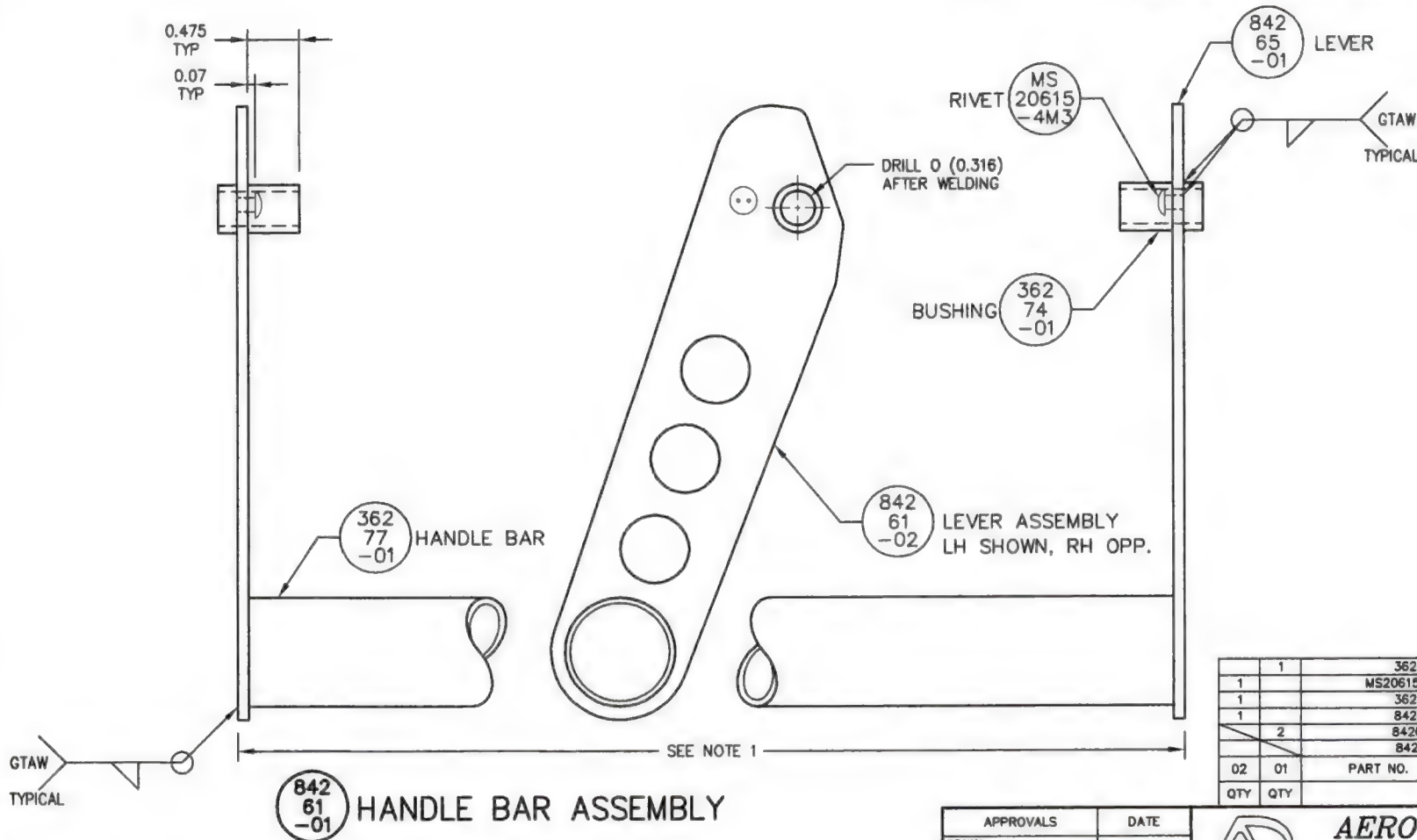
94027-01	01	PLACARD	6061-T6 ALUMINUM	QQ-A-250/11	0.050 SHEET
PART NO.	ITEM	DESCRIPTION	MATERIAL	MATERIAL SPEC	STOCK SIZE

LIST OF MATERIALS

THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECEPT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.	APPROVALS DRAWN: R. RATHWELL CHECKED: E. BURGAIN	DATE OCT 3, 2011	 AERO DESIGN LTD. 9888A MALASPINA ROAD POWELL RIVER, BC, CANADA, V8A 0G3 TEL: 604.483.2376 www.aerodesign.ca				
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS ANGLES X.XXX ±0.010 ±1/2" X.XX ±0.03 X.X ±0.1						
				EUROCOPTER AS350 & AS355 SERIES QUICK RELEASE CARGO BASKET PLACARD			
				SCALE 1 : 1 SHEET 1 OF 1	DWG. SIZE A4	DWG. NO. 94027	REV. 1

THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THE DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE		
1	HANDLE END BRACKETS FLIPPED	BJC	SEPT 19/11
2	TITLE BLOCK UPDATED; LEVER ASSEMBLY ASSIGNED P/N	BJC	MAR 13/14



QTY	QTY	PART NO.	DESCRIPTION
1	1	36277-01	HANDLE BAR
1		MS20615-4M3	RIVET (MONEL)
1		36274-01	BUSHING
1		84265-01	LEVER
2		84261-02	LEVER ASSEMBLY (RH/LH)
		84261-01	HANDLE BAR ASSY

NOTES:

1. LENGTH OF HANDLE TO BE DETERMINED BY BASKET ASSEMBLY DRAWING.
2. REMOVE ALL BURRS AND SHARP EDGES.
3. WELDING TO BE COMPLETED BY GTAW METHOD TO AMS2685C USING ER308L ROD.

APPROVALS	DATE
DRAWN: R. RATHWELL	JUNE 18/09
CHECKED: E. BURGAIN	

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES.
TOLERANCES ON:
DECIMALS ANGLES
X.XXX ±0.010 ±1/2°
X.XX ±0.03
X.X ±0.1



AERO DESIGN LTD.

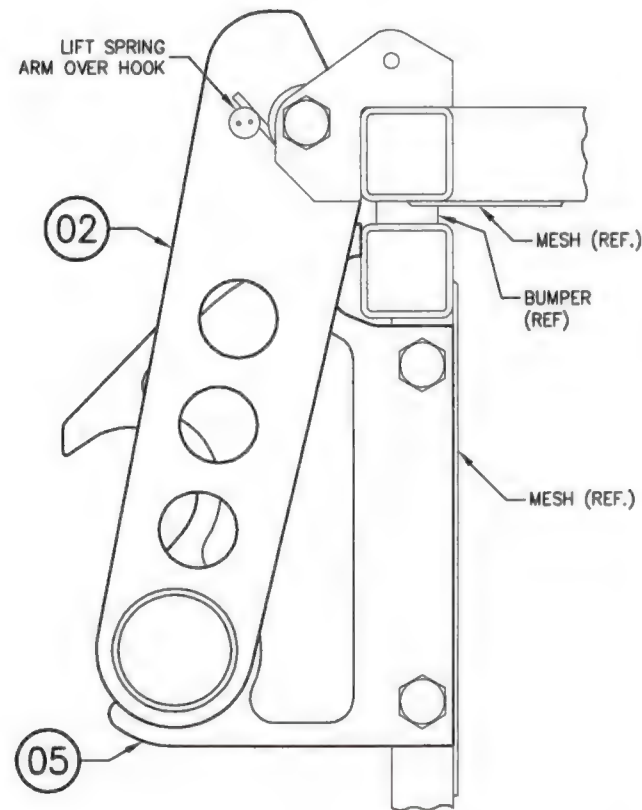
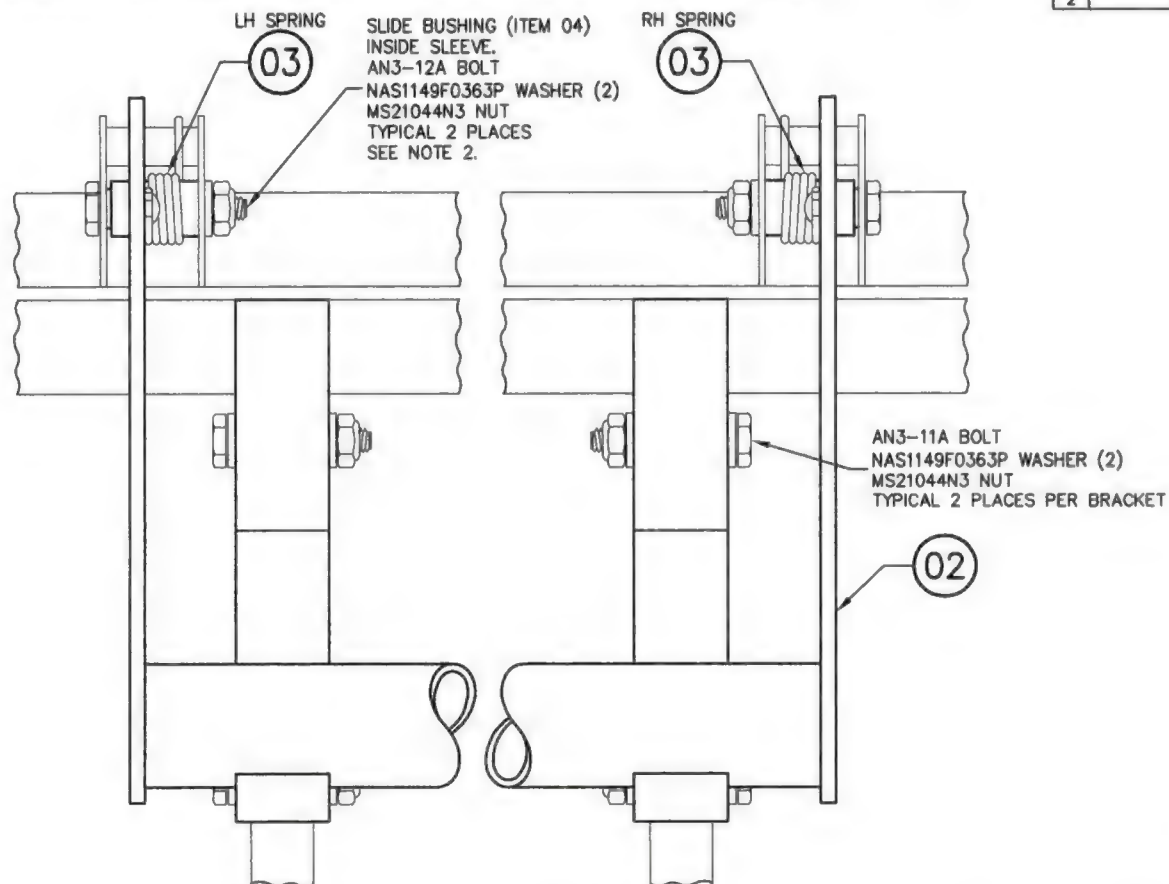
9888A MALASPINA ROAD
POWELL RIVER, BC, CANADA, V8A 0G3
TEL: 804.488.2378 www.aerodesign.ca

**HELICOPTER CARGO BASKET
HANDLE BAR ASSEMBLY**

SCALE	DWG. SIZE	DWG. NO.	REV.
SCALE 1 : 1	A3	84261	2
SHEET 1 OF 1			

NOTES:

1. THIS DRAWING IS AN ALTERNATE CONFIGURATION FOR THE HANDLE INSTALLATION SHOWN ON DRAWING 36255.
2. GREASE BUSHING (ITEM 04) USING MOBILGREASE 28 OR EQUIVALENT PRIOR TO INSTALLATION.



(01) HANDLE INSTALLATION

A/R	MOBILGREASE 28		GREASE	MIL-PRF-81322F
4	AN3-11A		BOLT	
2	AN3-12A		BOLT	
10	NAS1149F0363P		WASHER	
6	MS21044N3		NUT	
2	84267-01	05	BRACKET	
2	36275-01	04	BUSHING	
2	36278-01	03	SPRING (1 LH, 1 RH)	
1	84261-01	02	HANDLE BAR ASSEMBLY	
	84255-01	01	HANDLE INSTALLATION	
01	PART NO.	ITEM	DESCRIPTION	MATERIAL
QTY.	LIST OF MATERIALS			

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE - CREATED FROM 36255	BJC	NOV 03/09
1	HANDLE END BRACKETS FLIPPED	BJC	SEPT 19/11
2	TITLE BLOCK UPDATED; ADD NOTE 2; HARDWARE UPDATED	BJC	MAR 13/14

APPROVALS	DATE
DRAWN: JEFF CLARKE	03 NOV 2009
CHECKED: E. BURGAIN	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:	
DECIMALS	ANGLES
X.XXX ±0.010	±1/2°
X.XX ±0.03	
X.X ±0.1	



AERO DESIGN LTD.

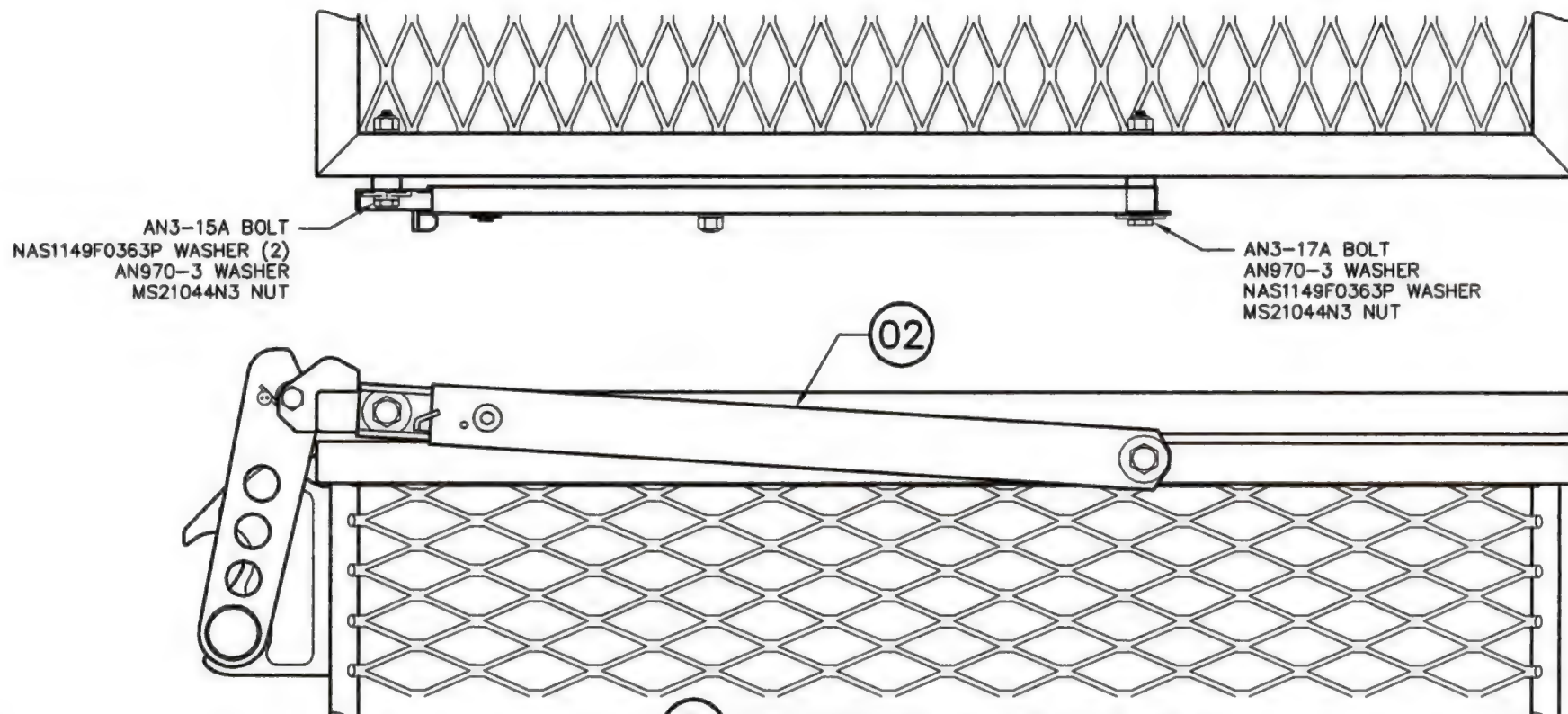
9688A MALASPINA ROAD
POWELL RIVER, BC, CANADA, V8A 0G3
TEL: 604.683.2278 www.aerodesign.ca

**HELICOPTER CARGO BASKET
HANDLE BAR INSTALLATION**

SCALE 1 : 1	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 1	A3	84255	2

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REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	*	*



01 LID BRACE INSTALLATION

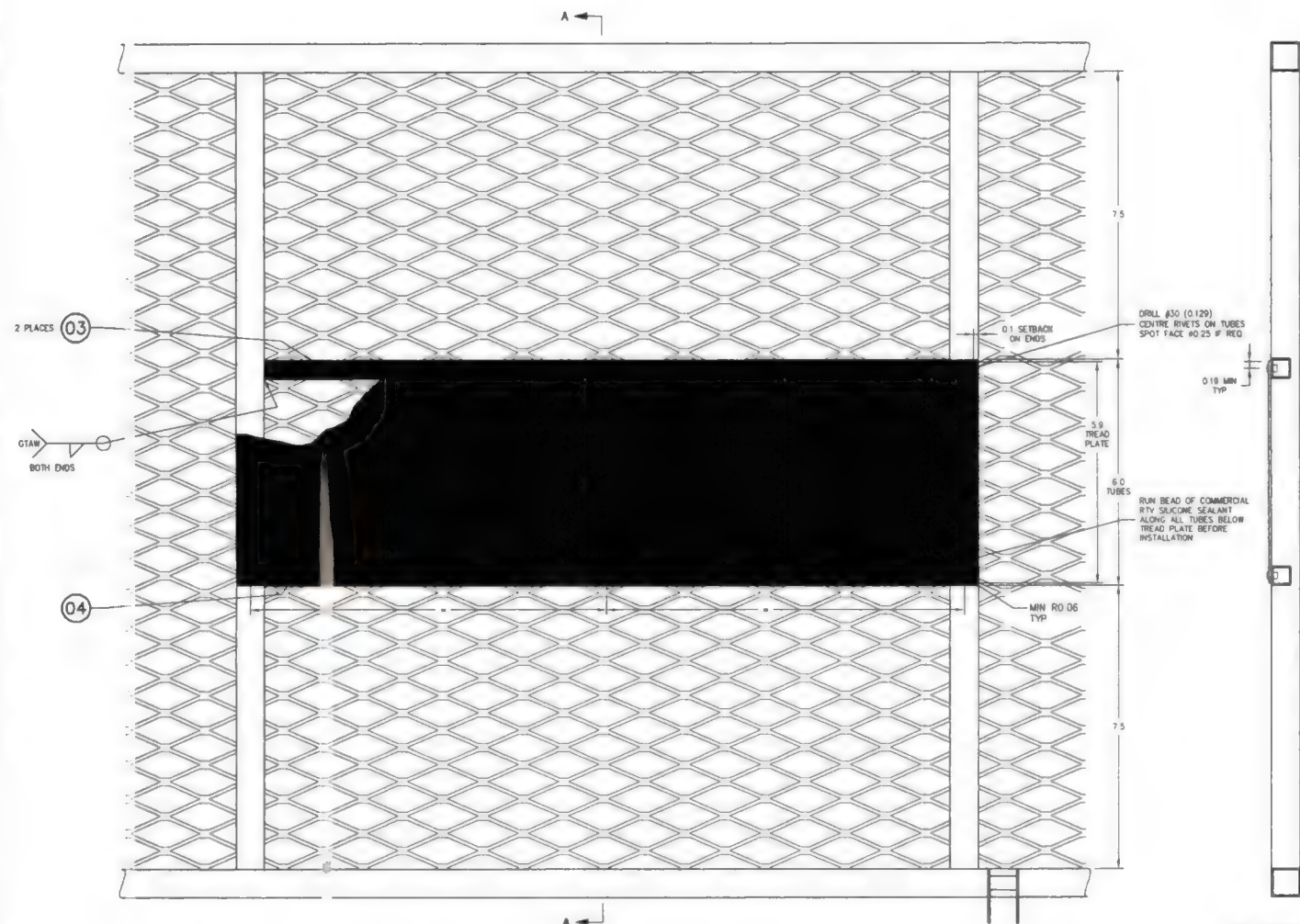
NOTES

- THIS DRAWING APPLIES TO ALL AERO DESIGN LTD. CARGO BASKET ASSEMBLIES.
LID PROP IS TO BE INSTALLED ON THE FORWARD END OF THE BASKET AS INSTALLED ON THE HELICOPTER.

2	MS21044N3		NUT
3	NAS1149F0363P		WASHER
2	AN970-3		WASHER
1	AN3-17A		BOLT
1	AN3-15A		BOLT
1	36280-01	02	LID BRACE ASSEMBLY
	84240-01	01	LID BRACE INSTALLATION
01	PART NO.	ITEM	DESCRIPTION
QTY.	LIST OF MATERIALS		

APPROVALS	DATE
DRAWN: JEFF CLARKE	21 MAY 2014
CHECKED: JASON REKVE	21 MAY 2014
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:	
DECIMALS	ANGLES
X.XXX ±0.010	±1/2°
X.XX ±0.03	
X.X ±0.1	

 AERO DESIGN LTD. 9888A MALASPINA ROAD POWELL RIVER, BC, CANADA, V8A 0G3 TEL: 604.483.8578 www.aerodesign.ca		HELICOPTER CARGO BASKET ALL MODELS LID BRACE INSTALLATION	
NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 1	A4	84240	0



(01) BASKET LID ASSEMBLY


SECTION A-A

THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THE DRAWING OR ANY PORTION THEREOF MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR ABUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.			
REV	DESCRIPTION OF CHANGE	INITIALS	DATE
1	ADD BELL MEDIUM AND EUROCOPTER AS350 BASKETS, CHANGE TUBES	BJC	MAR 19/08
2	ADD EUROCOPTER EC135 MCCONNELL DOUGLAS MD600N BELL 206B BASKETS	BJC	DEC 4/08
3	ADD NEW AS350 AND 206L/407 MODELS	BJC	DEC 4/08
4	TITLE BLOCK UPDATED, MODEL LIST REMOVED, ADD ALT RIVET, ADD NOTE 7	BJC	28/05/2014

NOTES:

- THIS DRAWING IS AN OPTIONAL CONFIGURATION ADDING A TREAD PLATE STEP TO THE LD. THIS CONFIGURATION MAY BE APPLIED TO ANY OR ALL BAYS OF THE LD. REMAINDER OF LD ASSEMBLY IS TO BE FABRICATED IN ACCORDANCE WITH THE APPLICABLE DRAWINGS.
- TUBES (ITEM 03) MUST BE WELDED IN PLACE BEFORE MESH IS WELDED ON BOTTOM.
- REMOVE ALL BURRS AND BREAK SHARP EDGES.
- WELDING OF 4130 STEEL TO BE COMPLETED BY GTAW METHOD TO AMS 2685C. WELDING ROD SHALL CONFORM TO ER70S-2 OR EQUIVALENT.
- WHEN ASSEMBLY IS COMPLETE, FILL ALL VENT HOLES WITH ROSETTE WELD.
- THOROUGHLY CLEAN AND POWDER COAT BASKET SUB-ASSEMBLIES PRIOR TO ASSEMBLY. INSTALL TREAD PLATE AFTER POWDER COATING.
- WIDTH AND POSITION OF LD STEP MAY BE ADJUSTED TO MATCH LD DOOR INSTALLED IN ACCORDANCE WITH DRAWING 70402 ON ADJOINING BAY OF THE LD.

A/R	CR3213-4-02	BLIND RIVET	ALTERNATE HR3213-4-02	
1	70405-04 04	TREAD PLATE	ALUMINUM	COMMERCIAL
2	70405-03 03	TUBE	4130 STEEL COND N	MIL-T-8736
1	SEE NOTE 1 02	BASKET LID ASSEMBLY		0.5 X 0.035 WALL TUBE
1	70405-01 01	BASKET LID ASSEMBLY - MODIFIED WITH STEP		
D1	PART NO	ITEM	DESCRIPTION	MATERIAL
QTY				LIST OF MATERIALS

BASIC CODE REF: NAS 523	DASH NO. FOR DIAMETER D=MFD. HEAD NEAR SIDE F=MFD. HEAD FAR SIDE	DASH NO. FOR LENGTH D=DIMPLE DIGIT # OF SHEETS TO BE DIMPLED	APPROVALS DRAWN: JEFF CLARKE 21 SEPT 2008 CHECKED: E BURCON	DATE	 AERO DESIGN LTD. 9888A MALASPONA ROAD POWELL RIVER, BC, CANADA, V8A 0G3 TEL: 804 485 5276 www.aerodesign.ca
BASIC CODES: BJ = MS20470AD BB = MS20426AD ARN = CR3213 ARN = CR3212	+ (U) INSTALL NEW RIVET + (R) REMOVE/REPLACE RIVET - (X) EXISTING RIVET	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS: X.XXX ±0.010 X.XX ±0.03 X.X ±0.1 ANGLES: ±1/2°	CARGO BASKET LID STEP MODIFICATION		
SCALE 1:15 SHEET 1 OF 1			DWG SIZE: A1 DWG NO: 70405 REV: 4		

Work Order: 2017-207Date Opened: 4 Dec. 2017

Material Tracking Sheet
Eurocopter AS350 / AS355
Extra Large Basket Assembly

1 of 2

Ass'y Step	Qty	Detail Drawing	Part Number	Description	Material	PO/WO
	1		94010-01	Cargo Basket Assembly		SIN 94001-84
Step 1				<i>Lid Assembly</i>		
	. 1		94012-01	Basket Lid Assembly		2017-178-02
Step 1.a.	. . 4		49205-14	Bumper	Argus Industries Bumper	See PDS
	. . A/R		--	Sealant	Commercial Silicone RTV sealant	N/A
Step 1.b.	. . 1		94027-01	Placard	0.063 Sheet, 6061-T6 Aluminum	2015-03
	. . 4		CR3213-4-02	Cherry Rivet		17070
Step 1.c.	. 1		70405-01	Lid Step Modification		
(option)	. . 1		70405-04	Tread Plate	3003 Aluminum Tread Plate, 0.063"	17081
	. . A/R		CR3213-4-02	Cherry Rivet		17070
	. . A/R		--	Sealant	Commercial Silicone RTV sealant	N/A
Step 2				<i>Basket Assembly</i>		
Step 2.a.	. 1		94011-01	Basket Body Assembly		2017-178-01
	. . 4		96710-01	Fitting	Alternate: Ancra 40088-14	See PDS
	. . 8		AN960-616	Washer		See PDS
Step 3				<i>Hinge Installation</i>		
	. 1		MS20001P4	Piano Hinge	95"	17017
	. 8		CR3523-5-02	Cherry Rivet		15031
	. A/R		CR3213-5-02	Cherry Rivet		16053
Step 4	. 1		84255-01	Handle Installation		
Step 4.a.	. . 2		84267-01	Bracket	Delrin, 3/4" Sheet	2017-50
	. . 4		AN3-11A	Bolt		See PDS
	. . 8		NAS1149F0363P	Washer		See PDS
	. . 4		MS21044N3	Nut		See PDS

Work Order: _____

Date Opened: _____

Material Tracking Sheet
Eurocopter AS350 / AS355
Extra Large Basket Assembly

2 of 2

Ass'y Step	Qty	Detail Drawing	Part Number	Description	Material	PO/WO
Step 4.b.	.. 1		84261-01	Handle Assembly		2017-194
	.. 2		36278-01	Spring (1 left, 1 right)	304 Stainless, 1/16" Dia Music Wire	See PDS
	.. 2		36275-01	Bushing	Brass, 5/16" Dia	See PDS
	.. 2		AN3-12A	Bolt		See PDS
	.. 4		NAS1149F0363P	Washer		See PDS
	.. 2		MS21044N3	Nut		See PDS
Step 5				Lid Brace Installation		
	. 1		36280-01	Brace Assembly		2017-170
	. 1		AN3-15A	Bolt		See PDS
	. 1		AN3-17A	Bolt		See PDS
	. 2		AN970-3	Washer		See PDS
	. 3		NAS1149F0363P	Washer		See PDS
	. 2		MS21044N3	Nut		See PDS
Step 6				Inspection	None	

Trial Run

Aero Design Ltd.
AMF 73-04
94010 (-01RH, -02LH)

Complete Product Assembly Instructions - Eurocopter AS350 XL Ski Basket

Work Order Number: 2017-207

Date Opened: 4 Dec. 2017

This sheet is designed to assist in the fabrication of Aero Design products in accordance with the company Manufacturing Policy Manual, the Canadian Aviation Regulations and other applicable technical documentation.

The reference column of the following table is for reference unless a specific instruction is called out.

Install placard on basket body

Parts:

Quantity	Part Number	Description	Material	PO/WO
1	94011-01-XX	Basket Body Assembly	N/A	2017-178-01
. 1	94017-01	Placard	0.050 Sheet, 6061-T6 Aluminum	2015-03
.. 4	CR3213-4-02	Cherry Rivet	aluminum	17070

Procedure:

Step	Description	Reference	Initial or SCA
1	Align placard on bracket on basket body	dwg 94010	CB
2	Drill #30 through placard and bracket, using holes in placard.	N/A	CB
3	Remove placard and de-burr holes in placard and on bracket.	N/A	CB

4	Locate placard on bracket, and cleco in place.	dwg 94010	CB
5	Rivet placard with four CR3213-4-02 CherryMax rivets.	N/A	CB

Install lid bumpers

Parts:

Quantity	Part Number	Description	Material	PO/WO
1	94012-01	Basket Lid Assembly	N/A	2017-178-02
.4	49205-14	Bumper	Argus Industries Bumper	Supps
. A/R	--	Sealant	Commercial Silicone RTV sealant	N/A

Procedure:

Step	Description	Reference	Initial or SCA
1	Drill ¼" holes using center drill, 4 places.	dwg 94010	CB
2	Fill bumper holes with RTV silicone sealant.	N/A	CB
3	Insert 49205-14 lid bumper, 4 places per lid.	N/A	CB

Attach checker plate

Parts:

Quantity	Part Number	Description	Material	PO/WO
1	70405-04	Lid Checker Plate	3003 Aluminum Tread Plate, 0.063"	17081
. A/R	--	Sealant	Commercial Silicone RTV sealant	N/A
. A/R	CR3213-4-02	Cherry Rivet	aluminum	17070

Procedure:

Note: Use gloves when touching surface of checker plate to prevent smudges or marks on the top surface.

Step	Description	Reference	Initial or SCA
1	Place masking tape on ribs of lid to protect it from the checker plate.	N/A	CB
2	Pull checker plate from stock and place on lid so that one end lines up with the top of the radius of the edge of the lid.	dwg 94010	CB
3	Mark the points where the checker plate meets the top of the radius of the other edge of the lid.	N/A	CB
4	Shear checker plate to marked length.	N/A	CB
5	De-burr edges of checker plate with scotch-brite wheel on bench grinder.	N/A	CB
6	Locate checker plate on lid and hold in place with bags of lead shot.	dwg 70405	CB
7	Mark and drill #30 holes: a. 0.25" from edge of checker plate, centre on cross members (0.38") b. 0.25" from edge of checker plate, middle of each walkway stringer	N/A	CB
8	De-burr and counter-bore (if required to provide clearance of rivet head on checker pattern) all holes in tread plate using 1/4" piloted counter bore on both sides.	N/A	CB

9	Remove tape and de-burr holes in lid.	N/A	CB
10	Apply bead of RTV silicone sealant along all tubes under checker plate	N/A	CB
11	Set checker plate in place, secure with clecos.	N/A	CB
12	Rivet checker plate to lid with CR3213-4-02 CherryMax rivets	N/A	CB

Hinge installation

Parts:

Quantity	Part Number	Description	Material	PO/WO
1	MS20001P4	Piano Hinge	95"	17017
. A/R	--	Sealant	Commercial Silicone RTV sealant	N/A
.. 8	CR3523-5-02	Cherry Rivet	monel	15031
.. A/R	CR3213-5-02	Cherry Rivet	aluminum	16053

Procedure:

Step	Description	Reference	Initial or SCA
1	Place hinge and lid on basket, making sure to align front edge of lid with front edge of basket. Clamp front edge of lid to the basket.	N/A	CB
2	Accurately locate hinge and clamp to lid rim. Make a mark on right end of hinge for accurate placement throughout assembly process. a. center fore/aft b. 0.15" – 0.18" down from top edge	N/A	CB
3	Put masking tape on the ribs of the basket behind the lid to protect them through the next few steps.	N/A	CB

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4	Drill #30 through holes in hinge into lid. Do the ends first and then do every other one. Cleco in place with 1/8 clecos. Drill holes up to #21 and replace 1/8 clecos with 5/32 clecos as you go.	dwg 94010	CB
5	Mark the fore/aft location of the hinge with a pencil. Clamp the hinge to the lid and place a small wedge under the rear of the lid on both ends to retain vertical position. Remove clecos.	N/A	CB
6	Place a rigid straight edge along the back of the hinge and clamp in place. This and the pencil marks will allow accurate placement of the hinge.	image 1	CB
7	Remove clamps from hinge, making sure that straight edge remains in place.	N/A	CB
8	Remove lid and deburr holes in lid.	N/A	CB
9	Confirm accurate placement of the hinge and clamp in place.	image 1	CB

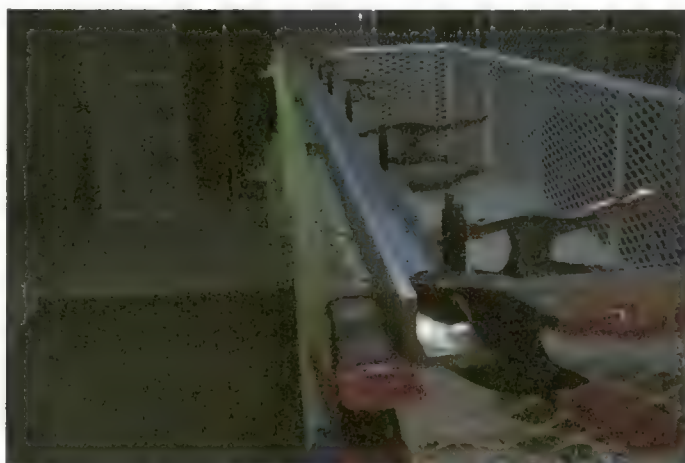


Image 1

10	Drill #30 through holes in hinge into basket tube. Cleco in place with 1/8 clecos.	N/A	CB
11	Drill holes up to #21 through hinge and tube. Replace 1/8 clecos with 5/32 clecos.	N/A	CB

12	Remove all clecos and deburr hinge and basket tubes	N/A	CB
13	Place hinge accurately on basket and cleco in place.	image 1	CB

Note: Put a small dab of RTV silicone around the perimeter of each rivet near the tip.

14	Attach hinge to basket with CherryMax rivets: a. CR3523-5-03 monel rivets – last 2 rivets in each end of hinge b. CR3213-5-03 aluminum rivets – all other locations on hinge	N/A	CB
15	Place lid accurately on basket and cleco in place.	N/A	CB

Note: Put a small dab of RTV silicone around the perimeter of each rivet near the tip.

16	Attach hinge to lid with CherryMax rivets: a. CR3523-5-03 monel rivets – last 2 rivets in each end of hinge b. CR3213-5-03 aluminum rivets – all other locations on hinge	N/A	CB
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Install Attachment Fittings

Parts:

Quantity	Part Number	Description	Material	PO/WO
.. 4	96710-01	Fitting	Alternate: Ancra 40088-14	See PDS
.. 8	NAS1149F0663P	Washer	N/A	See PDS
.. A/R	N/A	anti-seize compound	N/A	W/A

Procedure:

Step	Description	Reference	Initial or SCA
1	Carefully remove excess powder coat from around attachment lug threads using a countersink.	N/A	ETJT
2	Run 3/8-24 tap into attachment lugs to clear threads.	N/A	ETJT
3	Apply anti-seize compound to attachment fittings 96710-01 (alternate: Ancra 40088-14)	N/A	ETJT
4	Install attachment fittings with two NAS1149F0363P washers in four lugs in basket.	N/A	ETJT
5	Torque to 160-190 in-lbs (13.3-15.8 ft-lbs).	N/A	ETJT

Install handle brackets**Parts:**

Quantity	Part Number	Description	Material	PO/WO
.. 2	84267-01	Bracket	Delrin, 3/4" Sheet	2017-50
.. 4	AN3-11A	Bolt	N/A	See PDS
.. 8	NAS1149F0363P	Washer	N/A	See PDS
.. 4	MS21044N3	Nut	N/A	See PDS

Procedure:

Step	Description	Reference	Initial or SCA
1	Set 84267-01 handle bracket on provisions in hoops, 2 places. It may be necessary to clear the powder coating out of the holes with an angle drill and a #9 bit.	dwg 84255	JT
2	Install AN3-11A bolt, NAS1149F0363P washer (2), MS21044N3 nut. Two places per bracket, two brackets per basket.	dwg 84255	JT

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3	Torque AN3 bolts to 20-25 in-lbs.	N/A	JT
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Install handle

Parts:

Quantity	Part Number	Description	Material	PO/WO
..1	84261-01	Handle Assembly	N/A	2017-194
..2	36278-01	Spring (1 left, 1 right)	304 Stainless, 1/16" Dia Music Wire	See PDS
..2	36275-01	Bushing	Brass, 5/16" Dia	See PDS
..2	AN3-12A	Bolt	N/A	See PDS
..4	NAS1149F0363P	Washer	N/A	See PDS
..2	MS21044N3	Nut	N/A	See PDS
..A/R	N/A	Mobil Grease 28 or equivalent	N/A	N/A

Procedure:

Step	Description	Reference	Initial or SCA
1	Trim 36278-01R and 36278-01L springs to ensure end of spring does not extend past edge of handle bracket, approximately 1/8". Set springs over bushing of 84261-01 handle assembly.	N/A	JT
2	Grease two 36275-01 bushings with Mobil Grease 28 or equivalent. Insert into bushings of handle assembly.	N/A	JT
3	Locate handle on basket lid. Insert AN3-12A bolt with NAS1149F0363P through bracket on lid and handle bushing on one end of handle.	dwg 85255	JT
4	On other end of handle, hook spring over catch rivet on handle assembly and use spring tool to twist spring to catch arm on bracket on lid while inserting AN3-12A bolt with NAS1149F0363P washer through lid bracket and	Image 2	JT

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5	At first end, remove bolt and repeat step 4	N/A	JT
6	Install NAS1149F0363P washer and MS21044N3 nut on both AN3-12A bolts.	N/A	JT
7	Torque AN3 bolts to 20-25 in-lbs.	N/A	JT

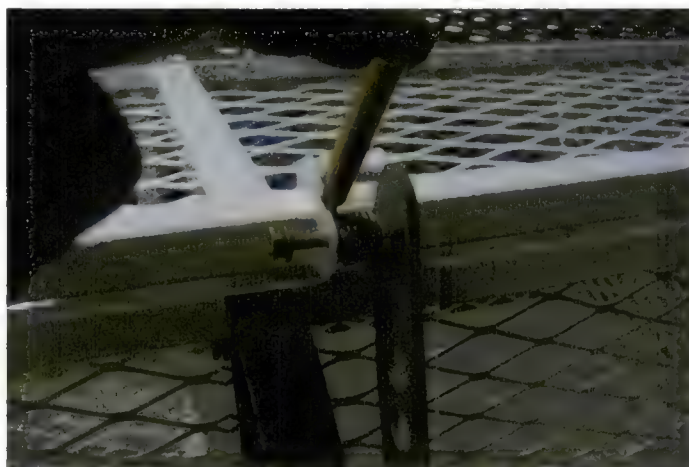


Image 2

Check handle

Procedure:

Step	Description	Reference	Initial or SCA
1	Operate handle to ensure handle does not bind and springs hold handle in.	N/A	CB
2	Snap handle into brackets to ensure handle locks.	N/A	CB

Install Lid Brace

Parts:

Quantity	Part Number	Description	Material	PO/WO
..1	36280-01	Brace Assembly	N/A	2017-170
..1	AN3-15A	Bolt	N/A	See PDS
..1	AN3-17A	Bolt	N/A	See PDS
..2	AN970-3	Washer	N/A	See PDS
..3	NAS1149F0363P	Washer	N/A	See PDS
..2	MS21044N3	Nut	N/A	See PDS

Procedure:

Step	Description	Reference	Initial or SCA
1	Locate 36280-01 lid brace on bushing on basket body. Ensure brace is on forward end of basket as it will be installed on the helicopter.	N/A	CB
2	On lid end, insert AN970-3 washer into end of lid brace. Insert AN3-15A bolt with NAS1149F0363P washer through AN970-3 washer, lid brace, and lid bushing. Install NAS1149F0363P washer and MS21044N3 nut on bolt.	dwg 84240	CB
3	On basket end, insert AN3-17A bolt with AN970-3 washer through lid prop and basket bushing. Install NAS1149F0363P washer and MS2144N3 nut on bolt.	dwg 84240	CB
4	Ensure brace is seated on lip of bushings before tightening nuts. This may require the removal of powder coating with a knife or sharp-edged file.	N/A	CB
5	Torque AN3 bolts to 20-25 in-lbs.	N/A	CB

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Final inspection

Procedure:

Note: This should be completed by someone who did not assemble the basket. Dual inspection.

Step	Description	Reference	Initial or SCA
1	Check for general condition and correct assembly: a. Bolts are tight b. Rivets are installed correctly c. Handle operates correctly d. Lid brace operates correctly	N/A	
2	Check that PO/WO numbers have been recorded.	N/A	

Aero Design

Parts Distribution Sheet

Description: Basket Assembly Kit

WO# 2017-207

[illegible]



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity:

1

PN:

Tread Plate

Aircraft:

All

Model: N/A

Description:

Lid Walkway Checker Plate

Supplier:

Ryerson

Color:

Aluminum

WO#:

N/A

PO# 17081



Aero Design Ltd.

9888 A Malaspina Rd., Powell River, BC
V8A 0G3, 604-483-AERO (2376)

Quantity:

1

PN:

MS20001P4-9600

Aircraft:

All

Description:

Hinge

Model: All

Supplier:

GKN Aerospace Bandy Machining

Color:

N/A

WO#:

N/A

PO# 17017